

NAME _____
PERIOD _____ DATE _____

PHYSICS QUIZ #25D
SHM Word Problems

A mass of 2.55 kg is attached to the end of a horizontally mounted spring which has a spring constant of $k = 625$ N/m. The mass is compressed against the spring until it is $A_0 = 21.0$ cm to the right of the equilibrium point and is then released.



1. What is the period of this oscillation? [3 pts]

2. What will be the position of this mass 0.450 seconds after it is released? [3 pts]

3. What will be the maximum velocity of this mass? [3 pts]

4. How long after being released will the acceleration of this mass be exactly zero? [3 pts]

5. What will be the angular velocity of this oscillator? [3 pts]